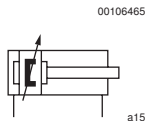


## Piston rod cylinders → Standard cylinders

**Mini cylinder, ISO 6432, series MNI**

► Ø 16 - 25 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: pneumatic, adjustable  
 ► with integrated rear eye ► piston rod: external thread ► ATEX optional



|  |   |
|--|---|
| Standards                              | ISO 6432                                  |
| Compressed air connection              | internal thread                           |
| Working pressure min./max.             | 1 bar / 10 bar                            |
| Ambient temperature min./max.          | -25 °C / +80 °C                           |
| Medium temperature min./max.           | -25 °C / +80 °C                           |
| Medium                                 | Compressed air                            |
| Max. particle size                     | 5 µm                                      |
| Oil content of compressed air          | 0 mg/m <sup>3</sup> - 5 mg/m <sup>3</sup> |
| Pressure for determining piston forces | 6,3 bar                                   |

|                           |  |
|---------------------------|--|
| Materials:                |  |
| Cylinder tube             | Stainless steel                              |
| Piston rod                | Stainless steel                              |
| Piston                    | Brass  |
| Front cover               | Aluminum, anodized                           |
| End cover                 | Aluminum anodized                            |
| Seal                      | Acrylonitrile Butadiene Rubber; Polyurethane |
| Nut for cylinder mounting | Steel, galvanized                            |
| Nut for piston rod        | Steel, galvanized                            |
| Scraper                   | Acrylonitrile Butadiene Rubber               |

**Technical Remarks**

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.
- Clamping piece for magnetic field sensor necessary
- ATEX-certified cylinders are available at Bosch Rexroth sales centres
- ATEX ID: II 2G2D c IIB T4 X -25 °C ≤ Ta ≤ 50 °C
- For ATEX-certified cylinders, the temperature range specified in the header does not apply. See the ATEX ID.

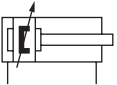
| Piston Ø                | [mm]          | 16   | 20     | 25    |       |  |
|-------------------------|---------------|------|--------|-------|-------|--|
| Retracting piston force | [N]           | 108  | 165    | 255   |       |  |
| Extending piston force  | [N]           | 126  | 195    | 305   |       |  |
| Cushioning length       | [mm]          | 9    | 13     | 17.5  |       |  |
| Weight                  | 0 mm stroke   | [kg] | 0.1    | 0.16  | 0.265 |  |
|                         | +10 mm stroke | [kg] | 0.0055 | 0.009 | 0.013 |  |
| Stroke max.             | [mm]          | 800  | 1300   | 1500  |       |  |
| Note                    |               | 1)   | 1)     | 1)    |       |  |

1) Material front cover: Aluminum

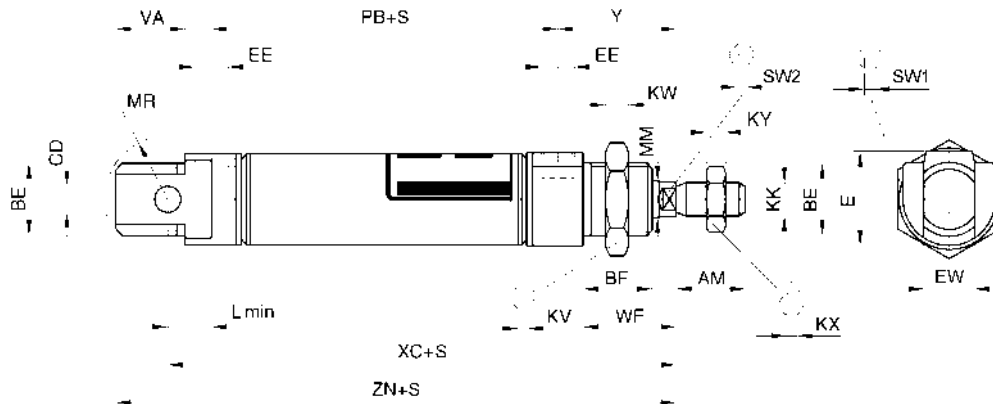
## Piston rod cylinders → Standard cylinders

**Mini cylinder, ISO 6432, series MNI**

► Ø 16 - 25 mm ► Ports: M5 - G 1/8 ► double-acting ► with magnetic piston ► cushioning: pneumatic, adjustable  
 ► with integrated rear eye ► piston rod: external thread ► ATEX optional

|   | Piston Ø<br>Piston rod thread<br>Ports<br>Piston rod Ø<br>Cylinder outer thread | 16<br>M6<br>M5<br>6<br>M16x1,5 | 20<br>M8<br>G 1/8<br>8<br>M22x1,5 | 25<br>M10x1,25<br>G 1/8<br>10<br>M22x1,5 |  |  |
|---|---|--------------------------------|-----------------------------------|--|--|--|
|  | Stroke 10   | <b>0822332501</b>              | <b>0822333501</b>                 | <b>0822334501</b>                        |  |  |
|   | 25  | <b>0822332502</b>              | <b>0822333502</b>                 | <b>0822334502</b>                        |  |  |
|   | 50  | <b>0822332503</b>              | <b>0822333503</b>                 | <b>0822334503</b>                        |  |  |
|   | 80  | <b>0822332504</b>              | <b>0822333504</b>                 | <b>0822334504</b>                        |  |  |
|   | 100   | <b>0822332505</b>              | <b>0822333505</b>                 | <b>0822334505</b>                        |  |  |
|   | 125   | <b>0822332506</b>              | <b>0822333506</b>                 | <b>0822334506</b>                        |  |  |
|   | 160   | <b>0822332507</b>              | <b>0822333507</b>                 | <b>0822334507</b>                        |  |  |
|   | 200   | <b>0822332508</b>              | <b>0822333508</b>                 | <b>0822334508</b>                        |  |  |
|   | 250   | -                              | <b>0822333509</b>                 | <b>0822334509</b>                        |  |  |
|   | 320   | -                              | <b>0822333510</b>                 | <b>0822334510</b>                        |  |  |
|   | 400   | -                              | -                                 | <b>0822334511</b>                        |  |  |
|   | 500   | -                              | -                                 | <b>0822334512</b>                        |  |  |

other versions can be ordered from Bosch Rexroth sales offices

**Dimensions**

00106425\_1

Dimensions

| Piston Ø | AM-2 | BE      | BF | CD H9 | E  | EE       | EW d13 | KK       | KV | KW | KX | KY  |
|----------|------|---------|----|-------|----|----------|--------|----------|----|----|----|-----|
| 16       | 16   | M16x1,5 | 16 | 6     | 19 | M5 t=5   | 12     | M6       | 22 | 6  | 10 | 3.2 |
| 20       | 20   | M22x1,5 | 18 | 8     | 28 | G1/8 t=8 | 16     | M8       | 30 | 7  | 13 | 4   |
| 25       | 22   | M22x1,5 | 21 | 8     | 28 | G1/8 t=8 | 16     | M10x1,25 | 30 | 7  | 17 | 6   |

| Piston Ø | L  | MM f8 | MR | PB ±1 | VA | WF ±1,2 | XC ±1 | Y ±1 | ZN ±1,4 | SW 1 | SW 2 |
|----------|----|-------|----|-------|----|---------|-------|------|---------|------|------|
| 16       | 9  | 6     | 16 | 47    | 17 | 22      | 82    | 27   | 95.5    | 19   | 5    |
| 20       | 12 | 8     | 18 | 51    | 19 | 24      | 95    | 32   | 109.5   | 28   | 6    |
| 25       | 12 | 10    | 19 | 55    | 21 | 28      | 104   | 36   | 119.5   | 28   | 8    |

t = depth of thread